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Remarks

The Office Action mailed January 10, 2006 has been carefully considered. Claims 1-16 are pending in the case. Claims 17-27 are withdrawn. Claims 13-16 are allowed. Claims 1-5, 8, and 12 are rejected and claims 6, 7, and 9-11 are objected to as being dependent upon a rejected base claim. This amendment rewrites claims 6, 7, and 9 in independent form so they should be allowed, along with claims 10 and 11, which are dependent on claim 9. Claim 1 has also been amended.

The Office Action rejected claims 1-4 and 8 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 425,553 to Smith in view of U.S. Patent No. 6,601,248 to Sage-Passart. The Office Action rejected claims 1-5 and 8 under 35 U.S.C. §103(a) as being unpatentable over Smith in view of U.S. Patent No. 3,236,482 issued to Fitzgerald. Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Smith in view of U.S. Patent No. 5,934,309 issued to Batten.

Specifically, the Office Action says that it would have been obvious to one skilled in the art to combine Smith, which teaches a substantially horizontal drain pipe with a plurality of discrete openings that align with sink drain tailpieces, and Sage-Passant, which teaches support brackets. Fitzgerald teaches the use of a hanger strap for supporting a pipe. Batten teaches an oil/grease separator. In this case, the examiner has failed to make a prima facie case of obviousness.

The present invention teaches an apparatus for providing air gaps for sinks. The apparatus includes a manifold pipe having a length and having a plurality of discrete openings along its length. Each of the openings faces the same direction transverse to the length. A support bracket for the manifold pipe suspends the manifold pipe substantially horizontally under the sinks so that the openings align with sink drain tailpieces without contacting the sink drain tailpieces and thereby form air gaps. An outlet at one end of the manifold pipe is adapted to connect to a downstream flow direction of sink effluent. The manifold pipe is made up of a plurality of sections including straight pipe sections and Tees, with the openings being openings in the Tees. In an embodiment, the manifold pipe has a second end that is closed. The apparatus includes a support bracket having two supports for axially spaced locations of the manifold pipe.

8. The apparatus further includes a drain flow control adapted to be installed on a sink drain

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tailpiece to collimate effluent flow from the tailpiece to direct the effluent flow to an opening in the manifold pipe aligned below the tailpiece.

A rejection of a claim in a utility application under 35 U.S.C. § 103(a) based on combinations of prior art references is a legal conclusion which must be based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of obviousness. The references must provide one of ordinary skill a motivation to combine their respective elements to yield the claimed invention. In Re Dembiczak, 50 U.S.P.Q. 2d 1614 (Fed. Cir. 1999).

Smith discloses a pipe system for wash-tubs. Outlet plugs a pass through the bottoms of the tubs and are connected to the couplings B by the intervening vertical pipes D or secured directly to the plugs a by the nuts b. (Cols. 1-2, lines 45-53) Smith does not disclose a substantially horizontal pipe having discrete opening that do not contact the tailpieces of the sink drains as in the present invention. The present invention provides an apparatus providing air gaps that prevent backflow into sinks. Smith's invention allows backflow because the wash-tubs are connected directly to the pipe system Smith teaches.

Sage-Passant discloses a detachable unit 6 attached to a removable appliance. (Col. 3, lines 5-10) The detachable unit 6 is supported by a support bracket 56. The brackets system is adjustably mounted on two bracing rods to allow the height of the spigot 18 to be adjusted to the height of the drain aperture 43. (Col. 4, lines 1-10) Even if a person of ordinary skill in the art were to combine Smith with Sage-Passant, they would not do so without contacting the openings and tail pieces. Neither Smith nor Sage-Passant disclose or suggest leaving an air gap.

Fitzgerald teaches a pipe hanger for suspending conduits. (Col. 1, lines 5-10) Even if a person of ordinary skill in the art combined Fitzgerald's pipe hanger with Smith's pipe system, one would not create an air gap apparatus since neither Fitzgerald or Smith teach discrete openings in line with sink tailpieces that do not contact the tailpieces. Thus, the rejections of claims 1-5 and 8 have been overcome.

Batten teaches an oil/grease separator. Even if a person of ordinary skill in the art added an oil/grease separator downstream of Smith's pipe system, the present invention would not be the result. Batten does not disclose or suggest an air gap. Thus, claim 12 should be allowed.

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The Office Action included several pages of PTO-1449 filed by applicant, but the pages numbered 3 of 4 and 4 of 4 do not have the examiner's initials indicating consideration of those references. It is respectfully requested that the examiner's next communication include such notations.

By this amendment the Applicant has placed the case in condition for immediate allowance and such action is respectfully requested. However, if any issue remains unresolved, Applicant's attorney would welcome the opportunity for a telephone interview to expedite allowance and issue.

Respectfully submitted,

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